# PROGRAM ELEMENT EVALUATION REPORT Maine Marine Biotoxin Monitoring Program

State: Maine Date of Evaluation: March, 2001

Program Element Evaluated: Marine Biotoxin Monitoring

# A. Previous deficiencies

No continuing deficiencies.

## B. Number of areas evaluated

Total number of growing areas = 34.

The Biotoxin Monitoring Program is a separate activity within the DMR, and operates statewide, independent of the other growing area survey and classification activities.

## C. Current Deficiencies

For convenience and clarity, the requirements relating to a Marine Biotoxin Monitoring Program are quoted from the 1999 ISSC <u>Model Ordinance</u>. Comments in italics are made relating to each requirement following the quote.

#### @.04 Marine Biotoxin Control.

## A. Contingency Plan.

(1) The Authority shall develop and adopt a marine biotoxin contingency plan for all marine and estuarine shellfish growing areas.

The DMR has a " Contingency Plan for the Control of Marine Toxins in Maine, 2000" which the DMR appears to follow.

- (2) The plan shall define the administrative procedures and resources necessary to accomplish the following:
  - (a) Initiate an emergency shellfish sampling and assay program;

This is not addressed in the current Plan.

- (b) Close growing areas and embargo shellfish;
- (c) Prevent harvesting of contaminated species;

These [(b) and (c)] are addressed.

(d) Provide for product recall;

This is not addressed in the current Plan.

- (e) Disseminate information on the occurrences of toxic algal blooms and/or toxicity in shellfish meats to adjacent states, shellfish industry, and local health agencies; and
- (f) Coordinate control actions taken by Authorities and federal agencies.

The administrative procedures and the resources needed to implement (e) and (f) are not defined in the current Plan.

(3) and (4) Not applicable

**B. Marine Biotoxin Monitoring.** In those areas where marine biotoxins are likely to occur

in shellfish, representative samples of shellfish shall be collected during all harvest periods. Samples shall be collected from indicator stations at intervals determined by the Authority, and assayed for the presence of toxins in accordance with §C.

The Plan gives a good description of the routine monitoring program.

## C. Closed Status of Growing Areas.

- (1) A growing area, or portion(s) thereof as provided in §A.(4), shall be placed in the closed status for the taking of shellstock ... based on the following criteria:
  - (a) The concentration of paralytic shellfish poison (PSP) equals or exceeds 80 micrograms per 100 grams of edible portion of raw shellfish; or

These criteria are followed.

(b) For neurotoxic shellfish poisoning (NSP),

This is not applicable to Maine.

(b) For domoic acid, the toxin concentration shall not be equal to or exceed 20 ppm in the edible portion of raw shellfish.

These criteria are followed.

(2) For any marine biotoxin producing organism for which criteria have not been established under this Ordinance, either cell counts in the water column or biotoxin meat concentrations may be used by the Authority as the criteria for not allowing the harvest of shellstock.

The DMR has established a limit of 1 ppm DSP in the hepatopancreas of shellfish, and routinely monitors the water column for its causative organism..

(3) When sufficient data exist to establish that certain shellfish species can be safely exempted from the marine biotoxin contingency plan, the closed status for harvesting may be applied selectively to some shellfish species and not others.

Species by species closure and reopening are used by DMR.

(4) The closed status shall remain in effect until the Authority has data to show that the toxin content of the shellfish in the growing area is below the level established for closing the area.

This criterion is met.

- (5) The determination to return a growing area to the open status shall consider whether toxin levels in the shellfish from adjacent areas are declining.
- (6) The analysis upon which a decision to return a growing area to the open status is based shall be adequately documented.

Although it is evident that (5) is met, satisfaction of the documentation requirement is questionable. The only consistent analysis provided is the statement in the legal notice of reopening stating "Department personnel have sampled the area and have determined that shellfish in this area no longer contain dangerous levels of red tide toxin."

D. Heat Processing. Not applicable

- **E. Records.** The Authority shall maintain a copy of all of the following records:
  - (1) All information, including monitoring data, relating to the levels of marine biotoxins in the shellfish growing areas;
  - (2) Copies of notices placing growing areas in the closed status;
  - (3) Evaluation reports; and
  - (4) Copies of notices returning growing areas to the open status.

All records are kept as required. There are no evaluation reports (see C above).

## D. Recommendations

The Contingency Plan should be rewritten to address each of the requirements of the Model Ordinance, Chapter IV.@.04, Marine Biotoxin Control.

The documentation and evaluation report required in C(6) and E(3) must be created before the areas are reopened. It was pointed out in past reports that "The report on the monitoring program should contain the data collected prior to reopening an area, and should *provide the reader with an evaluation of the meaning of included data*. This is a requirement of the Model Ordinance."

#### E. Corrective Actions

See Recommendations.

F. Special projects, training programs, etc. requested by the DMR.

None at this time.

## G. Conclusion

The marine Biotoxin Monitoring Program generally meets the operational requirements of the NSSP. However, there are several administrative requirements defined in the Model Ordinance that are not met in the Contingency Plan, or in its implementation.

H. Summary of State's response (if applicable).

Not available at this time.